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Notice of Allowability	Application No.	Applicant(s)	
	10/657,676	MA, YAO-DONG	
	Examiner	Art Unit	
	Toan Ton	2871	

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 04/11/05.
2. ☒ The allowed claim(s) is/are 13-18 and 23-34.
3. ☒ The drawings filed on 08 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

(a) claims 1-12, 19-22 have been canceled as in accordance with the response filed 04/11/05.

(b) claims 23-34 have been added as in accordance with the response filed 04/11/05.

REASONS FOR ALLOWANCE

2. Claims 13-18 and 23-34 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not anticipate nor render obvious to one ordinary skilled in the art a method of manufacturing a broadband diffusively reflective polarizer comprising various steps as claimed, more specifically, applying the mixture onto at least one substrate with a predetermined surface condition to form a layer with a predetermined thickness while maintaining the mixture at mesomorphic phase, forming a film with a specula narrow band Bragg reflection, cooling the film to the room temperature at a predetermined speed maintaining a sufficiently low temperature for a controllable duration to let the first polymeric liquid crystal and the second polymeric liquid crystal partially separated into a plurality of discrete microchips, wherein the

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microchips having a plurality of reflection wavelengths are dispersed at least two dimensionally in the cholesteric film as a result of the thermo phase separation of the polymeric liquid crystals.

Ma ('039, '393), Wu ('805) disclose a cholesteric LCD display device comprising a polarizer employing cholesteric reflecting material. However, none discloses a method of manufacturing a broadband diffusively reflective polarizer comprising various steps as claimed, more specifically, applying the mixture onto at least one substrate with a predetermined surface condition to form a layer with a predetermined thickness while maintaining the mixture at mesomorphic phase, forming a film with a specular narrow band Bragg reflection, cooling the film to the room temperature at a predetermined speed maintaining a sufficiently low temperature for a controllable duration to let the first polymeric liquid crystal and the second polymeric liquid crystal partially separated into a plurality of discrete microchips, wherein the microchips having a plurality of reflection wavelengths are dispersed at least two dimensionally in the cholesteric film as a result of the thermo phase separation of the polymeric liquid crystals.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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CONTACT INFORMATION

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 13, 2005


TOANTON
PRIMARY EXAMINER